\mathbf{PATENT}



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PROVISIONAL SPECIFICATION.

Improvements in or relating to Caravans.

I, MYER JAFFE, 41, Parkfield Road, Liverpool, Russian Nationality, do hereby declare the nature of this invention to be as follows :-

This Invention relates to caravans and has for its object to provide a new or improved form of caravan structure which may be readily expanded or opened out at will to provide substantial accommoda-tion for the occupants.

A caravan, according to my Invention, comprises a rigid main room or compartment and one or more collapsible room structures composed of wall, roof, and 15 floor components hingedly attached to the exterior of said rigid or non-collapsible room so as to lie snugly against adjacent wall or walls of said main room when in their out-of-use positions. Thus the struc-ture may be used as a single room or compartment or the hinged components thereof may be erected or expanded, as and when desired, to provide a main room with one or more annexe rooms or com-25 partments whereto access may be had from the main room by way of doorways in one or more walls of the main room structure, such doorways being preferably normally closed by means of french 30 windows serving as doors.

In carrying out my Invention according to one convenient mode of embodiment, a collapsible room structure may be provided at each side of the main rigid 35 room or compartment to create, when erected, two side apartments, such apartments communicating with the main room by way of a french window fitted to each side wall of the central room and having, 40 preferably hinged, windows, a bay window being also conveniently provided in an end wall of the main room. Access to the respective rooms may be attained from the exterior of the structure through 45 one or more suitably-situated doorways.

The or each annexe room may comprise a member hinged to a lower longitudinal edge of the main room so as to fold downwardly and serve as a floor which may be 50 supported in its operative position by means of hinged or other suitable legs, a pair of end members hinged to the opposed corners of the main room so as

to fold outwardly and form end walls, a roof member hinged to the side of the main room above said floor member, and a further member hinged to the outer free edge of the fluor or roof member so as to serve as a side wall when swung outwardly to complete the supplementary, room structure.

Whilst collapsed, said hinged room, components are conveniently sheltered by the overhanging eaves or roof portion of the main room structure and the hinged 65 roof component of the or each annexe room serves to shield and protect the hinged wall and floor components thereof.

Upon erection of the collapsible room or rooms, weather and draught-proof joints are preferably made at meeting or adjoining edges of the hinged room components by means of rubber strips or in any other convenient manner.

If desired also, some or all of the hinged 75 room components may each be composed of two or more independently-movable sections to facilitate erection of the collapsible room or rooms.

Articles of furniture, such as beds, tables, and seats, are also hingedly mounted in recesses, or the like, in the side walls of the main 100m structure, so that they may be readily brought into their positions of use or stowed away in a neat and compact manner when not re-

quired for use.

The structure may be completed by a collapsible veranda provided at an end of the main room structure and arranged to be opened out or erected in manner similar to the collapsible side room or rooms. Such veranda conveniently consists of hinged floor and roof members and suitably ornamented side walls and a doorway leading onto the veranda is formed in the adjacent end wall of the main room.

Any suitable means may, of course, be provided to retain the several hinged com- 100 ponents of the structure in their respective positions of use; and collapsible steps may be associated with the structure to permit ready access to the rigid and collapsible rooms.

In some cases, the main structure itself

may be mounted on wheels or on a suitable chassis to facilitate transportation of the same, as and when desired.

Dated this 1st day of September, 1931.

JOHN HINDLEY WALKER. 139, Dale Street, Liverpool, and

125. High Holborn, London, W.C. 1. Agent for the Applicant.

COMPLETE SPECIFICATION.

Improvements in or relating to Caravans.

I, MYER JAFFE, of 41, Parkfield Road, 5 Liverpool, in the County of Lancaster, (Russian Nationality), do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained 10 in and by the following statement:-

This Invention relates generally to improvements in caravans, but more particularly caravan vehicles for trailer use in connection with motor cars, and the 15 like, and has for its object to provide a caravan which, when adapted for trailer use, may be towed in a collapsed condition, and which may be readily expanded into two or more apartments as and when

20 desired. A caravan, according to my Invention. comprises or includes, in combination, a rigidly built permanent main room or compartment; floor, roof, and wall components hingedly or pivotally attached to the exterior of said non-collapsible main room structure in such manner as to normally fold or lie flatly against adjacent wall or walls thereof, and, when erected 30 or moved to their operative positions, to provide at the side or at opposed sides of said main room one or more collapsible and supplementary side rooms or compartments, means being also provided in

35 wall portions of the structure to permit ready access to said separate rooms or compartments of the structure at will. Said main room or compartment of the structure consists of a floor, roof, and side 40 and end wall components all fixedly connected together; and the or each collapsible side room or compartment is created by the adjacent longitudinal wall of the rigid main room, a floor hingedly 45 attached to a lower longitudinal edge of said main room structure, end walls hingedly attached to opposed front and

rear corners of said main room, and a single or divided side wall hingedly 50 attached to the outer free edge of said floor, roof or end wall components of the collapsible room structure, and a single or divided member hingedly attached to the adjacent roof eaves of said main room

· 55 structure to serve both as a roof for the supplemental side room and as a means

for conceiling and maintaining said hinged side room components in their inoperative positious.

If so desired, a collapsible veranda may be mounted at one end of the permanent room of the structure.

Other and additional features of my Invention are hereinafter more fully described and claimed in the claiming clauses concluding this specification.

I will further describe my Invention with the aid of the accompanying sheet of explanatory drawings which illustrate. by way of example only, one mode of 70 carrying the same into effect.

In said drawings:-

Fig. 1 is a front view, Fig. 2 a side elevation, and Fig. 3 a rear view of a trailer caravan constructed in accordance with the Invention, the structure being shown as it appears when ready for road transport.

Fig. 4 is a front elevation illustrating the caravan structure in process of expan-

sion or erection.

Figs. 5 and 6 are front and rear perspective views, drawn to a reduced scale as compared with the preceding views, of the structure fully extended or opened cut ready for use.

Fig. 7 is a diagrammatic plan showing the layout of the caravan structure when

fully extended.

Fig. 8 is a fragmentary perspective 90 view showing a convenient mode of accommodating beds, tables, seats, and other suitable articles of furniture within the caravan structure

In the several views like characters of 95 reference denote like or equivalent parts

wherever they occur.

Referring first more particularly to Figs. 1 to 7, inclusive, 1 generally indicates the chassis of the caravan upon 100 which is built a permanent central or main body portion, generally designated 2. of strong construction comprising a floor 3; side walls 4, 5 fitted with windows 6, 7, and French windows 8, 9 serving as 105 doors; end walls 10, 11 provided with a bay window 12 and door 13, respectively: a curved roof 14; and mollicroft 15.

Hinged at 16 to the four corners of

said central compartment 2-which conveniently constitutes a living room-are wall portions 17, 18 provided with pivotal windows 19 and doors 20, respectively, 5 and which walls normally rest or fold against said side walls 4, 5 of the noncollapsible room 2 and are adapted to be turned outwardly to their operative positions to form the respective end walls of 10 two relatively large supplementary side rooms or compartments 21, 22. Also hinged at 23 to the lower longitudinal edges of the central room floor 3 are a pair of oppositely-arranged floor portions 15 24 which are normally maintained in a vertical position and are adapted to be moved outwardly and downwardly about their hinges to form the floors of the collapsible side compartments 21, 22.

The divided side walls 25, 26 of the supplementary compartments 21, 22 are provided with pivotal windows 27 and are each composed of two sections which, as shown, are directly hinged at 28 to the 25 outer free edges of said floor members 24 and are adapted to be turned about their hinges until their free edges abut against longitudinal locking strips or beadings 29 on the divided roof members 30, 31 of the 30 supplementary rooms 21, 22. When the supplementary rooms are erected, the side walls 25, 26 thereof are positively held against both outward and inward movement or displacement by the hinged end 35 walls 17, 18 which act to maintain the side walls in contact with said roof beadings 29, the end walls themselves being prevented from outward displacement by means of stop ledges 32 provided on said 40 roof members 30, 31. Said roofs 30, 31 of the respective collapsible rooms 21, 22 are each directly hinged at 33 to the eaves of the roof 14 of the central or main room 2 of the structure so as to normally hang 45 vertically and conceal and maintain the several floor, side, and end wall components of the side rooms when in their collapsed condition. Any suitable means may, of course, be employed to lock or 50 retain the parts 30, 31 in the positions shown in Figs. 1 to 3, inclusive.

To erect the compartment or annexe 22 when so desired, it is merely necessary to raise the roof sections 31 thereof about 55 their hinges 33, lower the floor portion 24 together with the side wall members 26 about the hinges 23 to a horizontal pesition, swing said side wall members upwardly and outwardly about their hinges 60 28 into abutment with the beading 29 of the roof components 31, and finally swing the end walls 17, 18 outwardly about their hinges 16 into abutment or locking engagement with the side wall portions 65 26 and roof ledges 32. In erecting com-

partment or annexe 21 the same procedure is followed with the exception that the side wall components 25 are moved through an angle of 90° preparatory to or whilst the floor portion 24 is being swung to a horizontal position, this being due to the fact that said floor is normally located between the side and end walls 18, 25 when the parts are in their out-of-use position, whereas the wall portions 26 of the other side room are normally located between the end wall 18 and floor 24. The side walls of both supplementary rooms may, however, be located at one side or the other of the floor members as desired.

It is to be noted that the roof ledgings and beadings 32, 29 constitute draught excluders and also definitely prevent access of rain to the interior of the side rooms or compartments 21, 22. The adjacent or abutting edges of the roof and wall components of these rooms may also be stepped, or alternatively, edged with suitable material, such as rubber, to obtain draught and moisture-proof joints upon erection of the collapsible parts of the structure.

The collapsible side rooms 21, 22 when erected are suitably supported by legs 47 hingedly attached to the lower members 24 thereof, but if so desired, screwed or other detachable legs may be provided to fit into appropriately-arranged sockets; collapsible steps, as illustrated in Figs. 4. 5 and 6, may also be hinged or otherwise secured to the structure to facilitate access to the respective rooms or compartments 2, 21, 22 by way of the doorways

13, 20.
The caravan structure is preferably 105 equipped with lighting and heating apparatus, a compact hot and cold water supply installation, lavatory, and other necessary fittings and articles of furniture. In the case of beds, tables, and 110 seats, however, such articles are preferably, mounted so as to lie in a recess in or form part of the side wall or walls 4. 5 of the caravan when in their out-of-use positions. In Fig. 8, for example, a 115-hinged bed 34 and a hinged table 35 are built-in the side wall 5 and are adapted to be swung outwardly about their respective hinges 36, 37 until the pivotal leg components 38, 39 thereof engage with 120 the floor members 24 to rigidly maintain the bed and table in their operative positions as shown in dotted lines.

In addition, there is located at one end of the central room 2 a collapsible 125 veranda, generally designated 40, whereto access from the interior of said room may readily be effected by way of the doorway 13. Said veranda comprises two suitably ornamental side walls 41 hinged at 42 to 130

the vertical edges of the rigid end walls 11 of room 2, the hinges being so arranged as to allow said side walls to fold over each other and lie against the 5 rear wall 11 when collapsed; a floor member 43 hinged at 44 to the floor 3 of room 2 in such a manner as to lie against said side walls 41 when in its out-of-use position; and a roof member 45 hinged at 46 10 to the roof 14 so as to fold over and lie vertically against said floor component 43 when not in use; suitable means being also preferably provided to lock said roof member 45 in position concealing the floor and 15 wall members of the veranda. To erect the veranda, the roof member 45 thereof is raised and the floor member 43 is turned about its hinges 44 to a horizontal posi-tion and supported by the pivotal legs 20 47°: then the respective side wall members 41 are swung outwardly about their hinges 42 away from each other and are suitably locked to the roof and floor members, say, by entering edge tongues there-25 of into co-operating grooves or recesses formed in the said members of the veranda.

It is to be understood that I do not confine myself to the precise details of 30 construction or arrangement of parts as hereinbefore described as various alterations or modifications may be made without departing from the spirit and scope of the Invention as defined by the Claims. 35 For example, one of the side rooms or/and veranda of the structure may be omitted or the collapsible veranda may be constructed with an additional side wall hinged to one of the components thereof 40 so as to complete a further room provided with doors and windows. Each side wall and roof of the collapsible side rooms may also be made from a single sheet of material instead of two sections as shown. 45 Then again, the side walls of the supplementary rooms may be hinged to the outer free edges of the roof members of the side rooms so as to fold against the roofing members when in their collapsed 50 condition. Further, the caravan need not necessarily be adapted for trailer use since the chassis 1 or wheels thereof may be omitted and the floor 3 of the main room structure rested upon the ground or 55 a suitable foundation, or upon spaced support legs.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to 60 be performed, I declare that what I claim is:—

1. A carayan comprising or including, in combination, a rigidly built permanent main room or compartment consisting of 65 a floor, roof and aide and end wall com-

ponents all fixedly connected together; and further components hingedly attached to the exterior of said non-collapsible main room structure in such manner as to normally lie flatly against adjacent side 70 wall or walls thereof, and which components, when moved to their operative positions, provide at one side or each side of said main room a collapsible supplemental side room or compartment created by the adjacent longitudinal wall of the rigid main room, a floor hingedly attached to the adjacent lower longitudinal edge of said main room structure, and walls hingedly attached to adjacent front and 86 rear corner portions of the main room, a single or divided side wall hingedly attached to the outer free edge of the hinged floor, roof or end wall components, and a single or divided member hingedly attached to the adjacent roof eaves of said main room structure to serve both as a roof for the supplemental side room and as a means for conceiling and maintaining said hinged side room components 90 in their inoperative positons.

2. A caravan as claimed in the preceding Claim, in which said hinged floor, roof, and wall components are hingedly attached to said permanent room structure to provide on erection or expansion two collapsible supplementary side rooms or compartments which communicate with said central or intermediate room by way of doorways provided in the respective 100 side walls of the central room, and further doorways are provided in end walls of both the permanent and collapsible rooms or compartments of the structure to permit direct access into each separate room from 105 the exterior of the structure.

3. A caravan as claimed in either of the preceding Claims, in which stop ledges and/or beadings are provided on the hinged roof component of the or each 110 supplementary room structure to prevent outward displacement of the hinged side and end wall components thereof whilst erected and also to provide a watertight and draught-proof joint where said wall 115 components abut against the roof component.

4. A caravan as claimed in any one of the preceding Claims, in which the side and end walls of the or each supple- 120 mentary room are respectively hinged to the floor or roof components thereof and to opposed corners of the main room structure in such manner that opposed vertical edges of the hinged side walls 125 abut against and act to prevent inward displacement of the hinged end walls whilst the side room is erected.

5. A caravan as claimed in any one of the preceding Claims, in which the 30 hinged side wall and roof components of the or each supplementary room are each composed of two independently-movable sections to facilitate erection of said 5 collapsible side room or rooms of the structure, and suitable joint-making means are provided on meeting edges of such sections.

6. A caravan as claimed in any one of the preceding Claims, in which a collapsible veranda is provided at an end of the permanent main room or compartment of the structure, and a doorway is provided in the adjacent end of said room or compartment to permit access to the veranda from the interior of said main room.

7. A caravan as claimed in the preceding Claim 6, in which said veranda is composed of a floor component hinged to 20 a lower transverse edge of the main room or compartment at one end of said room structure, side wall components hinged to opposed corners of said main room, and a roof component hinged above said side 25 walls in such manner as to be supported by said side walls in its operative position upon erection or expansion of the veranda.

S. A caravan as claimed in either of the preceding Claims 6 or 7, in which said 30 components of the veranda are hinged to the structure in such manner that the side wells and floor lie flatly against a rizid end wall of the main room structure and are concealed by the hinged roof component of the veranda when the parts are 35 in their collapsed condition.

9. A caravan a sclaimed in any one of the preceding Claims 6 to 8, inclusive, in which co-operating tongues and grooves are provided on hinged components of the collapsible veranda structure to maintain the same in its erected condition.

10. A caravan as claimed in any one of the preceding Claims, in which beds, tables. seats, and similar fittings are hingedly or pivotally mounted in appropriately-formed apertures or recesses provided in the respective side walls of the permanent room or compartments of the structure, and are adapted to be supported on the hinged floor components of the collapsible side room or rooms when in their operative positions of use.

11. A caravan as claimed in any one of the preceding Claims, in which the rigid main room structure is erected upon a chassis having one or more pairs of appropriately-arranged road wheels, for the purpose specified

the purpose specified.

12: A trailer caravan substantially as hereinbefore described and illustrated in the accompanying drawings.

the accompanying drawings.

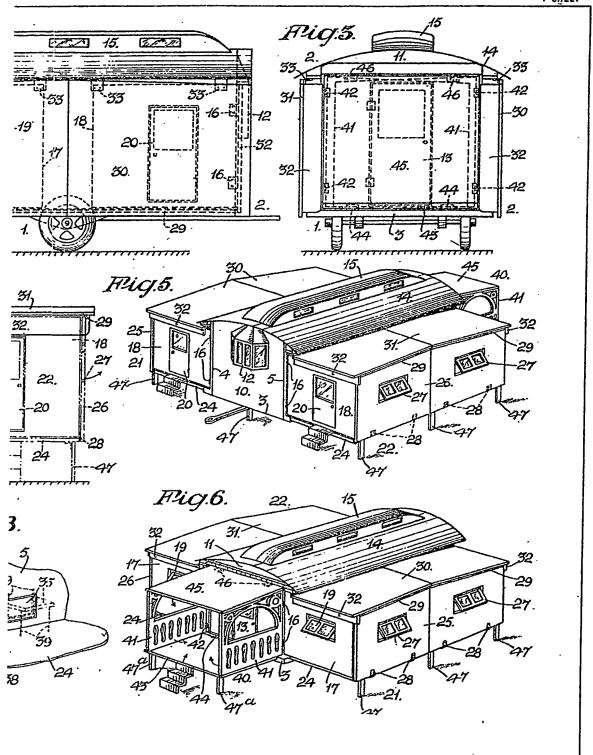
Dated this 31st day of October, 1931.

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